## Composting

Let's talk about it...

# Backyard Composting What and Why

- Composting is managing the natural recycling system of decomposition which converts organic material into humus
- It benefits you, your town, and the environment
  - Reduces the garbage that is sent for disposal resulting in reduced disposal costs
  - Saves you and your town money in reduced soil purchases

### Other benefits

- Produces valuable soil supplement by enriching the soil – it adds essential nutrients, improves soil structure, increases moisture and nutrient retention in the soil. Plants love compost!
- It's one way you can help the environment while converting your organic waste into a resource – turning your spoils to soil

### General info

- Enclosed compost piles are preferable to open piles
  - keeps out pests, holds heat and moisture in, and have a neat appearance
  - In urban areas, a rodent resistant bin must be used
    - (A secure cover and floor and openings no wider than one half inch)
  - Set up bin in a convenient, shady area with good drainage
  - A pile that is about 3' x 3' x 3' helps maintain heat generated by the composting organisms throughout the winter
    - Although a smaller pile may not retain heat, it will compost

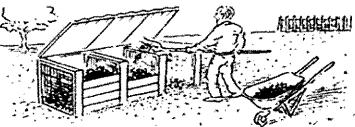
### Choose what works for you

- Purchase a compost bin or build one made of wood, wire, pallet, concrete blocks, or just use a garbage can with air holes drilled in and a lid
- One good opportunity You can order a bin, upon availability, from the Town of Wellfleet at a reasonable price and it looks like this:

 An average household can compost at least 500 pounds of organic material each year in this bin

## Bins you can make yourself

#### **Tuming Bins**



A series of three or more bins allows you to make compost in a short time by turning the materials on a regular schedule.



#### **Barrel Bin**

These bins can easily be made from plastic garbage cans.

#### Wire Bin

Wire bins can also be made for composting.



Graphics courtesy of the Massachusetts Audubon Society, the Seattle Solid Waste Utility, and the Massachusetts Dept of Environmental Protection

### Who does most of the work?

- "Compost Critters" bacteria, molds, fungi, earthworms, and insects – do most of the work of composting
  - "Compost Critters" live in soil and decomposing organic matter
  - Introduce them to your pile by sprinkling a few shovelfuls of garden soil after every 12" of fresh material
  - If you don't have garden soil, use decomposing leaves or partially finished compost instead

### Food Web of the Compost Pile

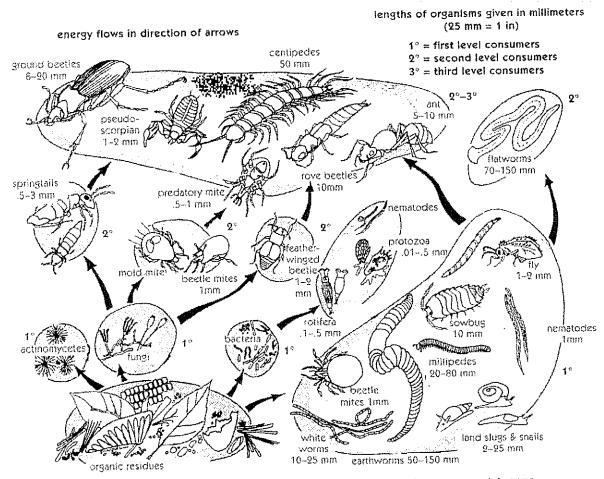


Figure 3.1 Soil organisms and their role in decomposing residues. Modified from D.L.Dindal, 1978.

#### **Compost Critters**

They need what we need...

- Food, Air, and Water
  - Food for compost critters:
    - Our organic "waste" materials leaves, grass clippings, fruit and vegetable scraps, etc
    - "Browns" = woody materials such as leaves, straw & paper products (high carbon)
    - "Greens" = moist materials such as grass, fruit & vegetables (high nitrogen)
    - Try for a "recipe" of 3 parts "Browns" to 1 part "Greens" to prevent odors
    - A pile of "Browns" only is fine; a pile of "Greens" only gets stinky

#### also...

#### – Air

- Compost "critters" need oxygen (like we do)
- Lack of oxygen slows down the composting process and causes odor
- Turn, fluff or stir the pile occasionally
- An alternative to turning build air passages into the pile with coarse materials (like straw, woodchips, stalks) or a perforated pipe

#### and...

#### Water

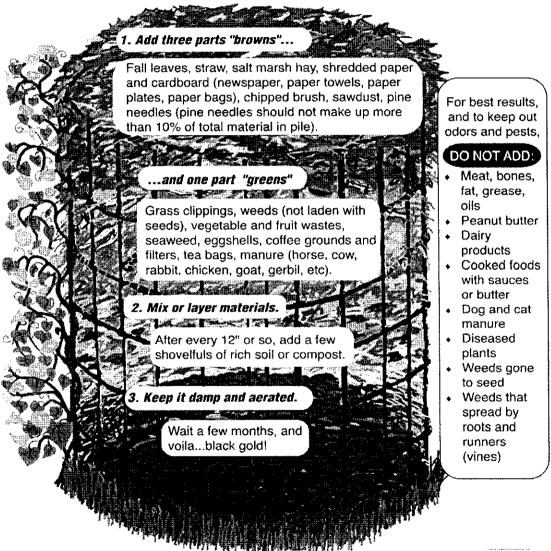
- Keep the compost material damp (like a wrung out sponge) If it's dripping wet, decomposition will stop and it can become smelly
- If the leaves in your pile rustle when stirred, they're too dry
- Replace moisture as needed with rain, snow or the hose – remove the cover when it rains or snows, or drill holes in a solid cover

### What not to add...

- For best results and to keep out odors and pests do not add:
  - Meat, bones, fat, grease, oils
  - Peanut butter
  - Dairy products
  - Cooked foods with sauces or butter
  - Dog and cat manure
  - Diseased plants
  - Weeds gone to seed
  - Weeds that spread by roots and runners (vines)

#### **Composting is easy!**

To make compost, just follow these simple steps:



## Getting Started

- Set up bin in a convenient, level area with good drainage
   in sun or shade
- If you bin comes with instructions, follow them for best results
- Simplest method:
  - Fill bin three quarters full with damp leaves and bury food scraps under the leaves for the next 6 months
  - Make sure leaves are damp when added or they will not break down. It's tough to dampen the lower layers of leaves in a dry pile. (Tip! Collect leaves for composting after it rains)
  - Sprinkle garden soil or compost (finished or partially finished) after every 12" of fresh material

## More Tips for Success

- If composting vegetable scraps, bury them in the center of the pile
- If composting grass clippings, stir them into the leaves
  - If you don't have leaves, substitute pine needles, hay/straw, ripped up newspaper, paper towels, sawdust or any other "Browns"
- Turn or stir pile when burying food scraps once a month, once a season, or once a year (frequent turning speeds the process - but is not required)

### and...

- A full bin holds the most heat fill it up in the fall and try to keep it full during cold weather
- Keep a few bags of leaves on hand to add throughout the year as needed
- If you don't have leaves, a bale of old hay or straw near the bin makes a convenient source of "Browns"

# When is compost ready, and how do I get it out?

- Compost should be ready to use in 6 months to a year
  - it will look like dark, crumbly, brown soil
- Finished compost will be at the bottom of the pile
- Small amounts can be harvested out the little door of the Earth Machine (if that's the bin you use)
- For large amounts, lift the bin up off the pile, push aside top layer of material, remove the finished compost underneath
- Refill bin, starting with the unfinished compost you removed from the top layer

# Is there an even easier way to harvest compost?

- Adding another bin or two makes harvesting compost easier
- After filling your 1<sup>st</sup> bin for 6 months, start a 2<sup>nd</sup> bin
   fill that one for the next 6 months
- Your 1<sup>st</sup> bin will now have mature compost ready to harvest and use – you can start refilling it while your 2<sup>nd</sup> bin "cooks"
- Continue to alternate bins, adding new material to the "fresh" bin while letting the other "mature"
- This system works well with whatever style of compost bin you use

#### How do I use my "Black Gold"?

- Compost is excellent for reseeding lawn and can be spread ¼ inch deep over entire lawn to rejuvenate the turf
- Spread compost on bare patches in lawn before reseeding – seeds will germinate faster and establish quickly
- Make organic potting soil mix equal parts compost, sand, and loam. You may screen it to remove large particles – these can go back in the compost pile
- Compost can be added directly to houseplants as need to top off and rejuvenate potting soil

### No yard to put a bin?

- If you have no yard for a compost bin, try indoor composting with red wiggler worms helping out
- Make a worm bin!
- But that's a story for another day.

If you really want to make a worm bin, see MassDEP's vermicomposting handout or check online.

http://www.mass.gov/dep/recycle/reduce/vermi.htm

# What's the easiest way to get rid of grass clippings?

- Leave them on the lawn where they help fertilize the grass and improve the turf
  - Easier than collecting and composting them
  - Much easier than bagging them and taking them to the Town's compost area
  - Best of all, it's best for the lawn!
- Turf experts nationwide agree clippings do not produce thatch
  - They are 80% water and decompose quickly
- Give it a try –you'll never bag clippings again!

For more information: http://www.mass.gov/dep/recycle/reduce/dtg.htm

## Now you know...

- Compost happens! An easy, cost-effective and environmentally sound thing to do
- Stop by Wellfleet Town Hall for a MassDEP Home Composting brochure that includes all this information and more or visit

http://www.mass.gov/dep/recycle/reduce/composti.htm

- Don't forget the Town of Wellfleet Transfer Station and Recycling Center (TS/RC) accepts yard waste for composting
  - Grass and leaves, Christmas trees, branches that are 6' long x 2" in diameter maximum
    - No vines, tree stumps or large timbers, please
       For more info on what is accepted at the TS/RC visit the Town's
       Recycling program at <u>www.wellfleetma.org</u> and click on the
       Recycling tab